Jiří Háva (*)

DESCRIPTIONS OF THREE NEW AFRICAN SPECIES OF *ANTHRENUS* O.F. MÜLLER AND NOTES ABOUT SOME OTHER INTERESTING DERMESTIDAE

(COLEOPTERA)

During the determination of some material coming from the following collections, I found three new species of the family Dermestidae and new records from various countries.

The following abbreviations refer to the collections, in which the examined material is deposited:

BMNH - The Natural History Museum, London (M. Brendell), United Kingdom;
CNCI - Canadian National Insect Collection, Ottawa, Ontario (A. Smetana), Canada;
HNHM - Hungarian Natural History Museum, Budapest (O. Merkl), Hungary;
JHAC - Jiří Háva, private collection, Praha, Czech Republic;
MSNG - Museo Civico di Storia Naturale "G. Doria", Genova (R. Poggi), Italy;
MMBC - Moravian Museum, Brno (J. Kolibáč), Czech Republic;
MRAC - Royal Museum for Central Africa, Tervuren (M. de Meyer), Belgium;
NZAC - New Zealand Arthropod Collection, Auckland (R. Leschen), New Zealand;
ZMAN - Zoologisch Museum, Amsterdam (B. Brugge), The Netherlands.

DESCRIPTION OF NEW SPECIES

Anthrenus (Nathrenus) boyesi n. sp. (Figs 1-4)

Type material: Holotype ♂: AFRICA: Swaziland, Luyengo, 10.IV.1977, J. M. Boyes leg. (CNCI).

Paratypes (11 spec.): the same data as holotype (CNCI, JHAC).

Distribution. Swaziland

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Description. Body length 2.5 – 2.9 mm, width 1.6 – 1.9 mm; body oval, black. Dorsal surface covered by black and white scales (Fig. 1). Individual scales mostly widest about middle with sides converging to strongly rounding apex. Antennae 11-segmented, black; antennal club 3-segmented, black, compact, terminal segment regularly rounded (Fig. 2). Eye with entire median margin. Ventral surface covered with black and white scales. Prosternum with only white scales. Metasternum with intermixed black and white scales, with a large patch of white scales at lateral margins. Abdominal sternites bearing larger spots of white scales at antero-lateral margins. Sternites I-IV with one large spot of white scales in the middle (Fig. 3). Legs black with white scales and white pubescence. Male genitalia as in Fig. 4.

Etymology. Dedicated to Mr. J. M. Boyes, who collected the type material of this new species.

Differential diagnosis. The new species colour pattern and arrangement of scales are very similar to those in *Anthrenus* (*Nathrenus*) *albostictus* Reitter, 1881, from which the new species differs by the following characters:

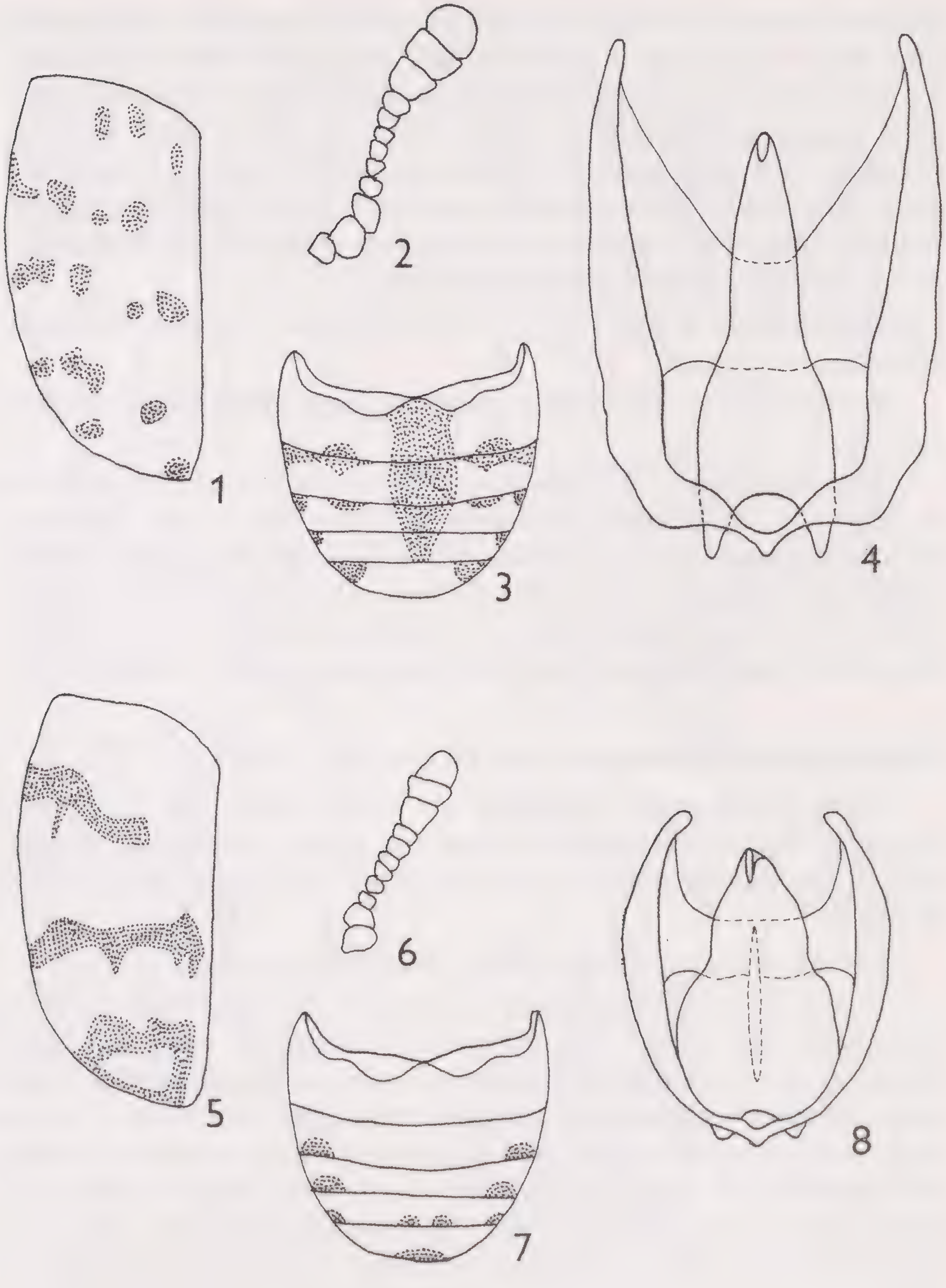
- *Anthrenus* (*Nathrenus*) *boyesi* n. sp.: antenna as in Fig. 2; each elytron with spots covered by white scales as in Fig. 1; abdominal sternites as in Fig. 3; male genitalia as in Fig. 4.
- *Anthrenus* (*Nathrenus*) *albostictus* Reitter, 1881: antenna as in Fig. 6; each elytron with three compact fasciae covered by white scales as in Fig. 5; abdominal sternites as in Fig. 7; male genitalia as in Fig. 8.

Anthrenus (Nathrenus) ***malawicus*** n. sp. (Figs 9, 10, 15)

Type material. Holotype ♂: MALAWI, Zomba, 1500 m, netted, 22.III.1971, S. Endrödy-Younga leg. (HNHM). Paratypes (9 spec.): the same data as holotype (HNHM, JHAC); (28 spec.): MALAWI, Blantyre, 1000 m, netted, 21.III.1971, S. Endrödy-Younga leg. (HNHM, JHAC).

Distribution. Malawi.

Description. Male body length 2.5 – 2.8 mm, width 1.5 – 1.7 mm; body oval, black. Dorsal surface covered by black and yellow scales. Individual scales long. Antennae 11-segmented, brown, antennal club 3-segmented, black, compact, with black setae (Fig. 9). Eye with entire median margin. Pronotum covered by yellow scales in the



Figs 1-8 - *Anthrenus* (*Nathrenus*) *boyesi* n. sp.: 1- left elytron (dotted area = white scales); 2- antenna; 3- abdomen (dotted area = white scales); 4- male genitalia; *A.* (*N.*) *albostictus* Reitter, 1881: 5- left elytron (dotted area = white scales); 6- antenna; 7- abdomen (dotted area = black scales); 8- male genitalia.

posterior margin, by black scales in the other parts. Each elytron with four transverse bands of yellow scales; other parts with black scales. Ventral surface covered with yellow and black scales; abdominal sternites bearing small spots of yellow scales at antero-lateral margins. Sternites I-IV with spots of black scales in the middle. Prosternum with only yellow scales. Metasternum with yellow and black scales, without a large patch at lateral margins. Legs brown with yellow scales and yellow setae. Male genitalia as in Fig. 10.

Female body length 2.5 - 2.9 mm, width 1.6 - 1.8 mm; similar to the male.

Etymology. The names refers to the distribution of the new species.

Differential diagnosis. The colour patterns and the arrangement of the scales are similar to those ones of the species of the *A.* (*N.*) *funebris* – group which differs from all other species of the subgenus *Nathrenus* Casey, 1900, by having long scales. *A.* (*N.*) *malawicus* n. sp. is very similar to *A.* (*N.*) *basilewskyi* Kalík, 1965, but differs for the morphology of antennae and male genitalia (Figs 11-12).

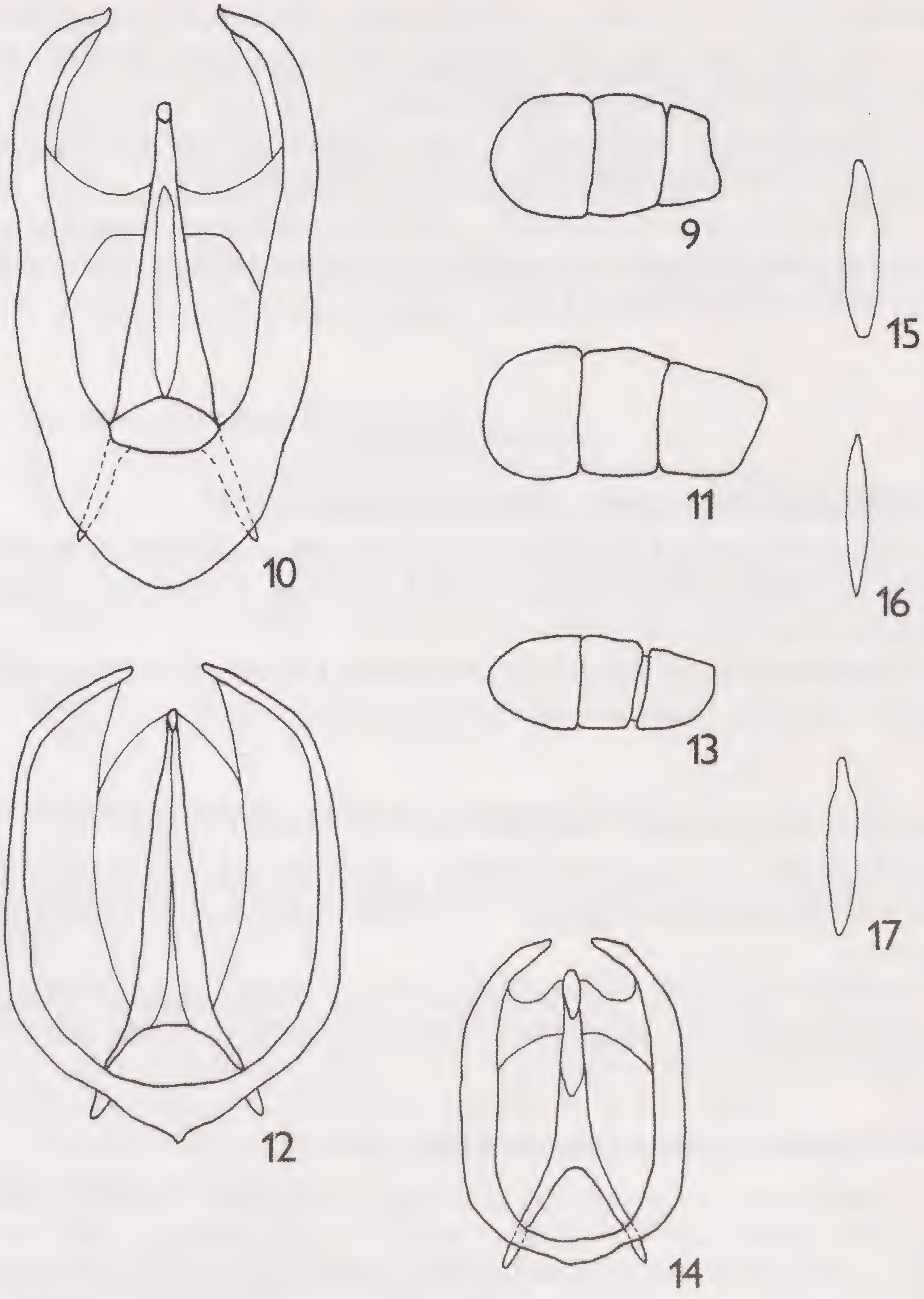
Anthrenus (Nathrenus) snizeki n. sp. (Figs 13, 14, 17)

Type material. Holotype ♂: SOUTH AFRICA, W. Cape, S of Lamberts Bay, 7-9.X.1999, M. Snížek leg. (MSNG). Paratypes (10 spec. Nos. 1-10): the same data as holotype (Nos. 1-6 in MSNG, Nos. 7-10 in JHAC).

Distribution. South Africa: West Cape province.

Description. Male body length 1.8 – 2.1 mm, width 1.3 – 1.5 mm; body oval, brown. Dorsal surface covered by white and light-brown scales. Individual scales long. Antennae 11-segmented, black, antennal club 3-segmented, compact with white setae (Fig. 13). Eye with entire median margin. Pronotum covered of intermoxed white and light-brown scales. Each elytron with five transverse bands of white scales, other parts with light-brown scales. Ventral surface covered with white scales; abdominal sternites not bearing small spots of different scales at antero-lateral margins. Sternites I-IV without spots in the middle. Prosternum with only white scales. Metasternum with only white scales, without a large patch at lateral margins. Legs brown with white scales and white setae. Male genitalia as in Fig. 14.

Female body length 2.0 - 2.2 mm, width 1.3 - 1.7 mm; similar to



Figs 9-17 - *Anthrenus* (*Nathrenus*) *malawicus* n. sp.: 9- antennal club, 10- male genitalia; *A.* (*N.*) *basilewskyi* Kalík, 1965: 11- antennal club, 12- male genitalia; *A.* (*N.*) *snizeki* n. sp.: 13- antennal club, 14- male genitalia. Individual scales: 15- *A. (N.) malawicus* n. sp.; 16- *A. (N.) basilewskyi* Kalík; 17- *A. (N.) snizeki* n. sp.

the male.

Variability. In some specimens the white bands of each elytron are fused, forming only three bands.

Etymology. Dedicated to the collector of the new species Miroslav Snížek (České Budějovice, Czech Republic).

Differential diagnosis. *A.* (*N.*) *snizeki* n. sp. is very similar to the precedent species but differs for the morphology of antennae and male genitalia (Figs 9-17).

NEW FAUNISTIC DATA

Anthrenus *(Anthrenodes)* ***amoenulus*** Reitter, 1896

Material examined. TURKEY, Hakkari Daglari, Semdinli, 1350 m, 9.VIII.1983, 35 spec., J. A. Lucas leg., J. Háva det., (JHAC, ZMAN).

Distribution. Species known from Caspian Lowlands, Caucasus, Armenia, Iran and Turkmenistan; first record from Turkey.

Anthrenus *(Anthrenus)* ***goliath*** Saulcy in Mulsant et Rey, 1868

Material examined. SYRIA bor., Idlib prov., Darkush env., Aln Al Zarka, 28.III.2001, 1 ♀, J. Skuhrovec leg., J. Háva det., (JHAC).

Distribution. Species known from Mediterranean, Balkan peninsula, Hungary, Turkey by HÁVA 2002; first record from Syria.

Anthrenus *(Nathrenus)* ***basilewskyi*** Kalík, 1965

Material examined. KENYA or., Voi (Tsavo), 8-18.XI.1996, 1 ♂, M. Snížek leg., J. Háva det., (JHAC); MALAWI, Mulanje Mts. env., 23-26.XII.2001, 38 spec., J. Halada leg., J. Háva det., (JHAC); MALAWI, Mulanje Mts. env., 23-26.XII.2001, 110 spec., J. Bezděk leg., J. Háva det., (JHAC).

Distribution. Species described by KALÍK 1965 from Tanzania; first record from Kenya and Malawi.

Anthrenus *(Nathrenus)* ***bulirschi*** Háva, 2000

Material examined. TURKEY, Ulucinar, 30 km NW of Antakya, 23.V.1993, 3 ♂, 1 ♀, V. Švihla leg., J. Háva det., (JHAC); SYRIA, 30 km SW of Kassab, 7.VI.1998, 1 ♂, J. Voříšek leg., J. Háva det., (JHAC); ISRAEL, Galilee, Nahal Keziv, 20.V.1999, 1 ♂, 2 ♀, V. Chikatunov leg., J. Háva det., (JHAC).

Distribution. Species described from Turkey by HÁVA 2001; first records from Syria and Israel; new data for Turkey.

Attagenus afghanus Háva, 2000

Attagenus klapperichi Kalík: SCHAWALLER, 1994: 27 (nomen nudum)

Remarks. Kalík determined material deposited in Staatliches Naturkundemuseum Stuttgart (Germany) as *Attagenus klapperichi* sp. n.. This species has never been described and it is identical with *A. afghanus* Háva, 2000. SCHAWALLER (1994) cited this undescribed species in the Coleoptera types catalogue of the Naturkundemuseum Stuttgart.

Dermestes *(Dermestes)* ***bicolor*** Fabricius, 1781

Material examined. NAFGHANISTAN, Prov. Herat, Bala Murghab, 470 m, 20-24.VI1964, 1 ♂, 1 ♀, O. Jakeš coll., J. Háva det., (MMBC).

Remarks. The above listed specimens, deposited in MMBC, were identified by V. Kalík as „Holotype“ and „Allotype“ of „*Dermestes jakesi* sp. n. V. Kalík det. 1983“. This species was never described; the specimens belong to the common species *D. bicolor* Fabr.

Distribution. Species distributed in Palaearctic region; first record from Afghanistan.

Dermestes *(Dermestes)* ***gerstaeckeri*** Dalla Torre, 1911

Material examined. SOUTH AFRICA, Twoomba, 13.XI.1974, 1 ♂, W. P. Thomas leg., J. Háva det., (JHAC).

Distribution. Species known from Kenya and Tanzania by HÁVA 2000; first record from South Africa.

Dermestes *(Dermestes)* **haemorrhoidalis** Küster, 1852

Material examined. BURUNDI: Kitega, (R. P. Giraudin), ex coll. Breuning, 1 ♀, J. Háva det., (MRAC); CONGO, P. N. A., Massif Ruwenzori, Kamusonge, 1900 m, 29.VIII.1952, 1 ♀, ex Batr. 27762/27796, J. Háva det., (MRAC).

Distribution. Species known from Europe, Russia, Mongolia, Japan, Tanzania, Madagascar, South Africa, Bolivia, Brazil, Argentina; first records from Burundi and Congo.

Dermestes *(Dermestes)* **voi** Háva, 2000

Material examined. ETHIOPIA, Shoa prov., Lake Langano, 14-16.IX.1973, 1 ♀, R. O. S. Clarke leg., J. Háva det., (MRAC).

Distribution. Species described from Kenya; first record from Ethiopia.

Dermestes *(Dermestinus)* **szekessyi** Kalík, 1950

Dermestes szekessyi ssp. *borealis* Kalík: SCHAWALLER, 1994: 27 (nomen nudum)

Remarks. Kalík named some materials deposited in SMNS as *Dermestes szekessyi borealis* ssp. n.. This subspecies was never described. SCHAWALLER (1994) cited this undescribed subspecies in the Coleoptera types catalogue of the Naturkundemuseum Stuttgart.

Evorinea iota (Arrow, 1915)

Material examined. TONGA, Tongatapu I., Nuku´alofi, 8.VIII.1975, 1 ♂, J. C. Watt leg., J. Háva det., (NZAC).

Remarks. The specimen was collected on banana *Musca* sp., across road from copra stone.

Distribution. Species known from Japan, Irian Jaya, Caroline Is., S. Mariana Is., Palau, Philippines, Ponape, Tanimbar Is., Truk (BEAL 1961); first record from Tonga.

Globicornis *(Globicornis)* **bifasciata** (Perris, 1866)

Material examined. SPAIN: MALLORCA, Alcudia, 22.V.1999, 1 ♀, S. Snäll leg., J. Háva det., (JHAC).

Distribution. Species known from France, Sicily, Algeria, Tunisia; first record from Spain: Mallorca.

Orphinus nesioticus Beal, 1961

Material examined. VANUATU, Efate Tagabe Agr. Stn., 22.XI.-2.XII.1983, 1 ♀, P. A. Maddison leg., J. Háva det., (JHAC).

Distribution. Species described from S. Mariana Is.: Guam I. (BEAL 1961); first record from Vanuatu.

Orphinus tabitha Arrow, 1915

Material examined. S. INDIA, Anamalai Hills, Cinohona, 3500 ft., IV.1957, 1 ♂, P. S. Nathan leg., J. Háva det., (JHAC); S INDIA, Cardamom Hills, 15 km SW of Munnar, Kallar valley, 1000 m, 6-18.XII.1993, 76°58´E 10°02´N, 1 ♂, 1 ♀, Z. Kejval & D. Boukal leg., J. Háva det., (JHAC).

Remarks. The specimens from S India were compared by me with the Lectotype of *Orphinus tabitha* Arrow, 1915, described from Ceylan (= Sri Lanka). Lectotype ♂ and 2 Paralectotypes (1 ♂, 1 ♀) (all designated J. Háva 2001) are deposited in BMNH.

Distribution. Species described from Sri Lanka by ARROW 1915; first records from South India.

Orphinus terminalis (Sharp, 1885)

Material examined. COOK ISLANDS, Rarotonga I., Totokoitu, 12.IX.1975, 1 ♀, J. Háva det., (NZAC).

Distribution. Species known from Hawaiian Is., Philippines, Samoa, S. Mariana Is., Marshall Is., Gilbert Is. (BEAL 1961); first record from Cook Islands: Rarotonga I.

Phradonoma eximium (Arrow, 1915)

Material examined. BOTSWANA, Gaborone, 6.II.1997, 22 spec., M. Snížek leg., J. Háva det., (JHAC).

Distribution. Species known from Congo and Zimbabwe; first record from Botswana.

Phradonoma haemorrhoum Gerstaecker, 1871

Material examined. KENYA or., Voi (Tsavo), 8-18.XI.1996, 17 spec., M. Snížek leg., J. Háva det., (JHAC).

Distribution. Species known from Tanzania by MROCZKOWSKI 1968; first record from Kenya.

Thylodrias contractus Motschulsky, 1839

Material examined. VENEZUELA, Edo. Aragua, Cuyagua, 10 km E Ocumare, 20.II.1971, 1 ♂, S. Peck leg., J. Háva det., (JHAC).

Distribution. Holarctic species (GOMPEL 1998); first record from Venezuela.

Trogoderma glabrum (Herbst, 1783)

Material examined. SULTANATE OF OMAN mer., Tawi Attair env., ca. 1100 m, 9.VIII.1999, 1 ♀, R. Červenka leg., J. Háva det., (JHAC).

Distribution. Holarctic species; first record from Sultanate of Oman.

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REFERENCES

ARROW G. J., 1915 - Notes on the Coleopterous Family Dermestidae, and Descriptions of some new Forms in the British Museum - *Ann. Mag. nat. Hist.*, London, 15: 425-451.

BEAL R. S., 1961- Insects of Micronesia. Coleoptera: Dermestidae. Bernice P. Bishop Museum, Insecta of Micronesia, Honolulu, Hawaii, Vol. 16, No. 3, pp. 109-131.

GOMPEL N., 1998 - *Thylodrias contractus* Motschulsky, 1839, une acquisition pour la faune de France (Coleoptera, Dermestidae) - *Bull. Soc. entom. France,* Paris,103: 349-353.

HÁVA J., 2000 - New interesting Dermestidae (Coleoptera) from the world with descriptions of ten new species - *Veröff. Naturkundemus. Erfurt,* 19: 161-171.

HÁVA J., 2002 - Five new species of Dermestidae (Coleoptera), with notes on synonymy and distribution of the family - *Acta Mus. Morav., Scient. biol.*, Brno, 87: 29-40.

KALÍK V., 1965 - Coleoptera Dermestidae. Mission zoologique de l'I. R. S. A. C. en Afrique orientale. (P. Basilewsky et N. Leleup, 1957). XCII - *Annales Mus. roy. Afrique centr.*, Tervuren, *Zool.*, 138: 215-224.

MROCZKOWSKI M., 1968 - Distribution of the Dermestidae (Coleoptera) of the world with a catalogue of all known apecies - *Annales Zool.*, Warszawa, 26: 15-191.

SCHAWALLER W., 1994 - Die Käfersammlung am Naturkundemuseum Stuttgart - *Stuttgarter Beitr. Naturkunde*, 508: 1-40.

ABSTRACT

The following three species are described, illustrated and compared with related taxa: *Anthrenus* (*Nathrenus*) *boyesi* n. sp. (Swaziland); *A.* (*N.*) *malawicus* n. sp. (Malawi); *A.* (*Nathrenus*) *snizeki* n. sp. (South Africa).

Extending the known geographic distribution, new records of the following species are published: *Anthrenus* (*Anthrenodes*) *amoenulus* Reitter, 1896 (Turkey); *A.* (*Anthrenus*) *goliath* Saulcy in Mulsant et Rey, 1868 (Syria); *A.* (*Nathrenus*) *basilewskyi* Kalík, 1965 (Kenya, Malawi); *A.* (*N.*) *bulirschi* Háva, 2000 (Turkey, Syria, Israel); *Dermestes* (*Dermestes*) *bicolor* Fabricius, 1781 (Afghanistan); *D.* (*D.*) *gerstaeckeri* Dalla Torre, 1911 (South Africa); *D.* (*D.*) *haemorrhoidalis* Küster, 1852 (Burundi, Congo); *D.* (*D.*) *voi* Háva, 2000 (Ethiopia); *Evorinea iota* (Arrow, 1915) (Tonga); *Globicornis* (*Globicornis*) *bifasciata* (Perris, 1866) (Spain: Mallorca); *Orphinus nesioticus* Beal, 1961 (Vanuatu); *O. tabitha* Arrow, 1915 (South India); *O. terminalis* (Sharp, 1885) (Cook Is.); *Phradonoma eximium* (Arrow, 1915) (Botswana); *P. haemorrhoum* Gerstaecker, 1871 (Kenya); *Thylodrias contractus* Motschulsky, 1839 (Venezuela); *Trogoderma glabrum* (Herbst, 1783) (Sultanate of Oman).

RIASSUNTO

Descrizione di tre nuove specie africane di *Anthrenus* O.F. Müller e note su altri interessanti Dermestidae (Coleoptera).

Sono descritte tre nuove specie africane del genere *Anthrenus* O.F. Müller: *A.* (*Nathrenus*) *boyesi* n. sp. (Swaziland); *A.* (*N.*) *malawicus* n. sp. (Malawi); *A.* (*N.*) *snizeki* n. sp. (Rep. Sudafricana).

Sono inoltre estese le distribuzioni geografiche di 17 specie, che vengono citate per alcune nazioni, ed in particolare: *Anthrenus* (*Anthrenodes*) *amoenulus* Reitter, 1896 (per la Turchia); *A.* (*Anthrenus*) *goliath* Saulcy in Mulsant et Rey, 1868 (Siria); *A.* (*Nathrenus*) *basilewskyi* Kalík, 1965 (Kenya, Malawi); *A.* (*N.*) *bulirschi* Háva, 2000 (Turchia, Siria ed Israele); *Dermestes* (*Dermestes*) *bicolor* Fabricius, 1781 (Afghanistan); *D.* (*D.*) *gerstaeckeri* Dalla Torre, 1911 (Rep. Sudafricana); *D.* (*D.*) *haemorrhoidalis* Küster, 1852 (Burundi, Congo); *D.* (*D.*) *voi* Háva, 2000 (Etiopia); *Evorinea iota* (Arrow, 1915) (Tonga); *Globicornis* (*Globicornis*) *bifasciata* (Perris, 1866) (Spagna: Maiorca); *Orphinus nesioticus* Beal, 1961 (Vanuatu); *O. tabitha* Arrow, 1915 (India meridionale); *O. terminalis* (Sharp, 1885) (Is. Cook); *Phradonoma eximium* (Arrow, 1915) (Botswana); *P. haemorrhoum* Gerstaecker, 1871 (Kenya); *Thylodrias contractus* Motschulsky, 1839 (Venezuela); *Trogoderma glabrum* (Herbst, 1783) (Sultanato di Oman).